25X1A CLASSIFICATION / GRAT REPORT NO. CENTRAL INTELLIGENCE AGENCY INFORMATIONA PERMI DATE DISTR. 24 September 1948 COUNTRY Czechoslovakia New Czechoslovak Army Se NO. OF PAGES 2 SUBJECT and Receiving Set 25X1A PLACE NO. OF ENCLS. 1 sketch 25X1 ACQUIRED SUPPLEMENT TO DATE OF REPORT NO. 25X1X Convent: The sending and receiving set which is described below 25X1A and whose sketch is attached to this report was first used by the Czechoslovak Arry during the recent maneuvers of Artillery units 25X1 25X1X l. The new Czechoslovak Army sending and receiving set (called "Skrivanek" the Lark) operates on ultra-short waves. The tuning is completely dispensed with and the change of frequency involves a simple operation of replacing the crystal (located below the cover plate in the lower left corner of the box) with another one of a different frequency. There are 12 crystals (and, consequently, 12 frequencies) to every set. The antenna is a dirole and must be exactly 240 cm long; otherwise the set will not work. The source of power (of the type produced to date) is the German made battery "Pertrix". The whole set is enclosed in a smooth box whose approximate dimensions are 30x22x 15 cm. In the lower right corner there is a bakelite lever which can be moved from 25X1 the horizontal position about 50 degrees in either direction (up or down). The urper position of the lever is marked "Z" (On), the lower one "V" (Off). Practically the entire operation of the set consists in roving the lever to the appropriate position. Below the upper surface of the box there is a small incandescent light (lamp); if the lever is moved to the upper position (marked  $^{n}Z^{n}$  - on), in about 5 seconds the light goes on and off as a signal that the set is really for operation. On either side of the box there are (electric) sockets: one for the cord leading from the battery, the other for the microphone. The microphone and earphones, when not in operation, are kept in a con ainer (the present type is the one used by the German Luftwaffe during the war). The weight of the box (i.e. the sending and receiving set) without the battery and without the container (nicrophone and earphones) is arproximately 4.5 kg (arrrox. 9.9 lbs.). CLASSIFICATION STATE NAVY X NSRB DISTRIBUTION

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- 3. The switch from sending to receiving is automatic (that is, as soon as the operator stops talking he can immediately receive without any additional manipulation of the set).
- 4. As the set operates on ultra-short waves, the range, reception and readability vary greatly. Natural and artificial obstacles reduce the range in some instances to 2 km. The maximum range on the ground is 24 km (15 miles) and in the air 55 km (almost 35 miles).
- 5. For the present, this type of sending and receiving set is being used in Milovice in the so-called independent artillery observation flights (air coordination of artillery fire); it may eventually be used by artillery regiments or by other Army units for intercommunication.
- 6. The disadvantage of the set (especially with respect to its use by the Ground Forces) lies in its great dependence on terrain conditions and in the limited choice of frequencies (12 crystals). The advantages are: small weight, rapid setting and changing of frequencies (crystals), no tuning, rapid setting of the set in operation, and the automatic switch from sending to receiving.
- 7. To put the set in operation the following steps are necessary:
  - a. Insert the appropriate crystal (frequency).
  - b. Insert the plug of the cord leading from the battery in the socket on the left side of the box.
  - c. Insert the plug of the cord leading to the microphone in the socket in the right side of the box.
  - d. Move the lever from the horizontal position to the letter "Z" (On).
  - e. Wait (approximately 5 seconds) for the incandescent light to go on and off; the set is then ready for both sending and receiving.
- 8. To turn the set off move the lever from the approximately vertical position to the letter "V" (off).

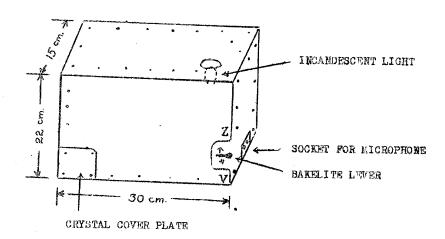
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ATTACHMENT I

## The New Czechoslovak Army Sending and Receiving Set ("Skrivanek")



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